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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,432

11/28/2003

Young Hoon Kwark

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02/21/2007

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VIENNA, VA 22182-3817

EXAMINER

BEVERIDGE, RACHEL E

ART UNIT

PAPER NUMBER

1725

MAIL DATE

DELIVERY MODE

02/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Advisory Action
Before the Filing of an Appeal Brief

Application No.

10/722,432

Applicant(s)

KWARK ET AL.

Examiner

Rachel E. Beveridge

Art Unit

1725

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 February 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see continuation sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☒ Newly proposed or amended claim(s) 29 and 30 would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: 4, 6, 14, 16, 18, 21, 22 and 28-30.
Claim(s) rejected: 1-3, 5, 7-13, 15, 17, 19, 20, 23, 24, 27, 31 and 32.
Claim(s) withdrawn from consideration: 25 and 26.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

reb
February 20, 2007

Response to Arguments

Applicant's arguments filed February 6, 2007 have been fully considered but they are not persuasive.

Applicant first argues that newly cited Grellmann clearly confirms Applicants' position all along during prosecution that the previously cited references are not relevant to the present invention (page 8). The Examiner reminds the applicant that newly cited reference Grellmann was cited and referenced in the rejection of newly added claims 31 and 32 which required new search and/or consideration after the Examiner's non-final action on June 19, 2006. Furthermore, Grellmann was not used or cited in order to read upon the independent claims, as seems to be argued by the Applicant in order to attempt to persuade the Examiner into reopening the application after final rejection. The Examiner also disagrees that Grellmann somehow "confirms... that the previously cited references are not relevant to the present invention," and points the Applicant to review the prosecution and all of the Examiner's responses to the Applicants' arguments regarding the instant prior art of record cited with respect to the rejection of the independent claims, specifically claim 1, and further in response to these arguments dated February 6, 2007.

Applicant then argues that the Examiner relies upon an interpretation that improperly dissociates the claim language, thereby ignoring its plain meaning (page 8). The Examiner once again disagrees with this argument. During patent examination, the pending claims must be "given the broadest reasonable interpretation." Applicant always has the opportunity to amend the claims during prosecution, and broad

interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). The Examiner again reminds the applicant that "proper" interpretation is in the eye-of-the-beholder and the "interpretation" of the claim is based on individual interpretation (as the Examiner has clearly pointed out can be interpreted in many different ways by many different people). More importantly, the Examiner "interprets" the claims with the broadest reasonable interpretation with respect to what one of ordinary skill in the art at the time of the invention would reasonably attain from the claim language. Thus, even though the Examiner's interpretation of the claim language differs from the Applicants' interpretation of the claim language, both interpretations are "proper" and Applicants' argument that the Examiner is not "properly" interpreting the claim language is moot. The Examiner has sufficiently defined and clarified her "proper" and broad interpretation of the claim language in several of the office actions of record and in the telephone interview on August 16, 2006, for example in the response to arguments over claim 1 in the final office action dated December 6, 2006 on pages 14-15.

The Applicant argues that the listing of allowable subject matter needs to be revisited by the Examiner in view of the newly cited Grellmann; further stating that Grellmann clearly demonstrates the plain meaning of the language of the original claims that requires that a specific signal line be designed with a plurality of bonding wires to provide a desired impedance effect (page 9). The Examiner acknowledges the Applicants' admission that Grellmann clearly teaches the claim language of the

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independent claim 1, as instantly of record (because the claim amendments after final have not been entered at this time during the prosecution of the case). The Examiner will address this issue at a later time during the prosecution of the case if the claims remain "read-upon" by the prior art Grellmann as the Applicant argues. However, the current rejections of record remain and in lieu of any new rejection or alternative rejection that could be made at this time; the Examiner disagrees that none of the references of the rejection currently of record address or even suggest the language that a signal line is configured for impedance by using a plurality of bonding wires (page 9). The Examiner will further explain this position later in the response to other arguments made by the Applicant with respect to this "other" prior art of record.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "specific" signal line [for example, see page 9, line 7; page 10, line 18; page 11, lines 19 and 23; page 12, line 16; and page 13, lines 10, 11, 27, and 28] and "single" signal line [for example, see page 12, lines 9, 16, and 24; page 13, lines 3, 4, 10, and 17; and page 14, line 3]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Examiner would further like to point out on the record that Applicants' admit that Grellmann is "reasonably directed to the plain meaning of the claimed invention" (page 11). The Examiner however, disagrees that Grellmann is the only reference

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reasonably directed to the claimed invention (page 11), of which the Examiner's position with regard to the Applicants' arguments based on the currently rejection of record will be discussed later in this response. The Applicant then argues that Grellmann clearly does not teach or suggest co-dispensing the plurality of bonding wires (page 11).

Although the rejection of the instant independent claims of record are not rejected over Grellmann, in response to the this argument the Examiner notes that the features upon which applicant relies (i.e. "co-dispensing the plurality of bonding wires") are not recited in the rejected claims(s); more specifically, this feature is not claimed in the instant claim 1 of record nor in the amended claim 1 after final (which has not been entered). "Co-dispensing" of the plurality of bonding wires is only claimed in previously presented claims 10 and 11, and newly amended claims 23 and 24 after final which have not been entered at this time. Furthermore, the Examiner reminds the applicant that Grellmann is not the currently prior art of record for the rejection of claims 10 and 11 and thus the argument with any regard to these claims are irrelevant; and, the new amendment of claims 23 and 24 including the addition of this feature among others requires new search and/or consideration after final rejection of these claims.

Applicant argues that Grellmann does not teach or suggest "providing a dielectric material such that a predetermined distance is maintained by said dielectric material separating a first bonding wire and a second bonding wire of said plurality of bonding wires to provide at least a part of said controlled impedance effect" as required by independent claim 1 (page 11). The Examiner notes that this newly claimed feature of claim 1 requires further search and/or consideration after final rejection; and in lieu of

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the previous rejection of dependent claim 5 which the features of seem to have been added to independent claim 1, the rejection of record is still maintained. Furthermore, the Examiner reminds the Applicant that Grellmann was not cited with respect to the rejection of claim 1 and as previously stated in the final rejection dated December 6, 2006; Horiuchi teaches or suggests the broad limitations of independent claim 1. The Applicant's arguments with respect to Grellmann over claims with which Grellmann was not cited during final rejection of the instant application would require further consideration after final rejection, and therefore the specific arguments with respect to the limitations of claims that Grellmann supposedly does not teach or suggest are moot and have not been addressed on the merits (just as the newly amended claims after final which require further search and/or consideration after final have not been entered at this time in the prosecution).

Applicant then argues that the reference Horiuchi does not suggest using a plurality of bonding wires for a "single" signal line, as required by the original claim language (page 12). However, as referenced above; the original claim language nor the instant claim language recite "single signal line;" nor is it clearly defined by the broad claim language that a "single signal line," "specific signal line," or "specific single signal line" is desired. Thus, the Examiner maintains her position with respect to the interpretation of the instant claim language and rejection of independent claim 1 over Horiuchi. See the final rejection dated December 6, 2006 and all response to arguments in the final rejection.

Applicant argues that the lines of Horiuchi do not suggest using multiple ones of the plurality of bonding wires for a "specific single signal line," and that one of ordinary skill in the art would agree with the Applicants' that in order to satisfy the plain meaning of the language of the independent claims, the "coaxial cable line" of Horiuchi would have to be construct so that the ground return is actually one of the bonding wires, not the electroconductive resin as used in Horiuchi's "coaxial cable line" (page 12). The Examiner notes that the Applicant has not claimed at any point during the prosecution that the ground return is part of the wires in a "single line," nor has the Applicant claimed a "specific single signal line." Based on the Examiner's broadest reasonable interpretation of the instant claim limitations of the independent claims, the wires of the instant claim are any wires and may or may not include a ground wire as applicant argues. Furthermore, Applicant has not provided any expert or person of "ordinary skill in the art" testifying that one would necessarily interpret Horiuchi this way and thus it would not read upon the instant claim language.

The Examiner also disagrees that Horiuchi does not teach a plurality of bonding wires for "a signal line" as is claimed in independent claim 1 (not a "specific" or "single" signal line as applicant argues (pages 12 and 13), which would require further consideration and/or search after final rejection). See Horiuchi, column 5, lines 15-33 and column 2, lines 1-9. The Applicant also argues that it is the Examiner's initial burden to point to at least one "specific single signal line" in Horiuchi for which multiple bonding wires are configured to provide a controlled impedance effect for that "specific signal line" (page 13). The Examiner disagrees because there is no burden on the

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Examiner to produce a rejection over limitations that are not claimed. The Examiner has met her burden to provide evidence that the prior art of record teaches or suggests "a signal line to be interconnected, using a plurality of bonding wires configured to provide a controlled impedance effect" (see Horiuchi, col. 2, lines 1-9 and col. 5, lines 15-33; and see all of the prosecution of record to this date, specifically the final rejection dated December 6, 2006 in which the Examiner clearly defined her interpretation of the broad claim limitations and the rejection of these broad limitations with respect to Horiuchi).

Applicant argues that there is no suggestion in Notani that the distance separating these two wires (claim 23) is significant in determining the impedance effect for the signal line (page 14). Applicant also argues that Notani fails to suggest co-dispensing a dielectric for the metal wires (page 14). The Examiner notes that these are newly claimed limitations of claim 23 after final rejection, which include new issues that would require new consideration and/or search of the claim, and the Examiner's consideration of Notani with respect to the new issues of newly amended claim 23 is not required after final rejection.

Conclusion

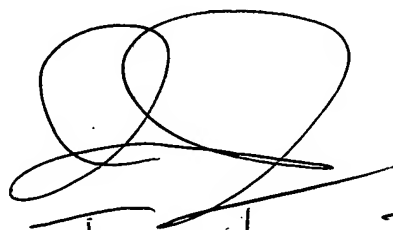
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel E. Beveridge whose telephone number is 571-272-5169. The examiner can normally be reached on Monday through Friday, 9 am to 6 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

reb
February 20, 2007



Jonathan Johnson
Primary Examiner